Grand Coulee Exciter Replacements G1 – G18

This project will replace the excitation equipment for all 18 generators in the Left and Right Powerplants. The existing exciters are functional and meet minimum operating standards, but they are all around 70 years old, require considerable maintenance and have many obsolete components. The use of salvage parts is the norm for current maintenance practices. The modern replacement exciters will respond faster and will have contemporary power system stabilizers which will enhance the generator’s ability to react to load swings and transient conditions on the power system. These generators play a major role in stabilizing the power grid.

This investment is part of a set of investments (including windings, governors and transformers) that represents a systematic replacement and upgrade of the electrical equipment in the Left and Right Powerhouses. The work will be scheduled in a series of six-month outages where the units are taken out of service one-by-one to perform this capital work as well as scheduled maintenance work. This approach is far more efficient and less costly than taking outages for individual component replacement contracts.